New Medical Imaging Facility: Site Considerations Discussed at Workshop

A multidisciplinary group of scientists—physicists, chemists, physicians, radiologists, nhusiologists, computer experts, errs, nuclear medicine specialists and technologists—met last week at an AHFMR-sponsored workshop to discuss where best on campus to house the two newest medical imaging technologies, Positron Emission Tomography (PET) and Nuclear Magnetic Resonance (NMR) (also called Magnetic Resonance Imaging (MRI).

The superconducting magnet for the NMR unit is already in storage

on campus, awaiting installation at the site chosen. Funding for PET is anticipated.

"PET and NMR are two new techniques that are doing something that nothing else will do. NMR is the ultimate when it comes to imaging structure, and PET is the ultimate when it comes to imaging function. A PET scan is going to be used for years to come as the only test for imaging function as it is happening in the living human body," said guest speaker Abass Alavi, Chief of the Division of Nuclear Medicine, Hospital of the University of

Pennsylvania, who was himself instrumental in developing a PET program that has become internationally known.

A number of imaging techniques are used in medicine today. PET, the newest of them all, differs considerably from all other techniques.

The commonest and oldest technique is x-ray radiography.
Then, about 50 years ago, when artificial radioactivity was discovered, nuclear medicine was born: certain radioactive elements are injected into the organ to be imaged, so that a gamma camera can

scan and picture it.

In the 1970s, medical imaging was revolutionized with the development of computed tomography (CT), which visualizes the organ slice by slice and presents it slice by slice to the viewer, using mathematical techniques of image reconstruction. This gives a much clearer picture than conventional x-ray radiography, where the image of the organ is blurred by tissue in front and behind it.

NMR, one of the most recent tomographic applications, is based on the fact that certain nuclei have "spin"—somewhat like spinning tops. The behavior of this spin can be modified by placing magnets around the body that contains the nuclei. By measuring the response of the nuclei to these magnets, and to radiofrequency signals, the concentrations of certain elements can be obtained tomographically. NMR yields pictures of organ structure, as does x-ray CT. But NMR offers an improved image, with finer detail. In addition, if the magnets are strong enough, NMR can provide biochemical information.

But it is PET, the newest technology, that opens up the most exciting range of possibilities: PET is the only nuclear medicine technique capable of providing a three-dimensional, quantitative, dynamic image of physiological processes as they are happening in the living human body. And that is PET's significance: that it allows study of function of organs and tissues, not just their structure. In this way it brings physicians closer to an understanding of various diseases: Parkinson's, Alzheimer's and Huntington's diseases, schizophrenia, tumors, stroke and coronary artery disease as well as diseases of the lung, kidney and liver. A powerful probe of what is happening in the living body, PET provides information that is otherwise unobtainable

At present, PET is at three sites in Canada: at the Montreal Neurological Institute, at UBC and at McMaster University (where the system is not yet fully fledged). Establishing a PET/NMR facility at our University will provide unparalleled research opportunities for scientists in a variety of disciplines. In addition, PET through its diagnostic services, will offer the immediate prospect of improved patient care, with further improvements in diagnosis and treatment in the future.

FOLIO

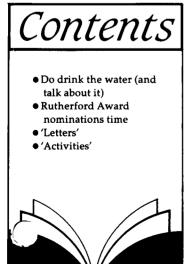
University of Alberta

12 December 1985

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The University of Alberta and the North

At the next annual meeting of the Association of Canadian Universities for Northern Studies, in Yellowknife, N.W.T., 17 to 19 April 1986, ACUNS hopes "... to



provide northerners, especially northern educators, with a comprehensive overview of those aspects of the universities which are of particular relevance to them. To this end, each member university is being asked to provide a profile of itself, focusing on northern studies" (ACUNS, Northline, Oct. 85, v.4, n.4). For this meeting, the Boreal Institute for Northern Studies is currently compiling, on behalf of the University of Alberta, a profile of the various teaching and research activities related to the North. In order to do this the Institute needs the assistance of the various Faculties on campus

The profile is to follow a format, including the following topic areas (if applicable):

- 1) Organization of northern studies (e.g., Faculty committees);
- 2) Northern courses (undergraduate and graduate levels);
- 3) Teaching in the North (field courses, northern extension courses, etc.);
- 4) Distance education

(correspondence courses, etc.);

- 5) Cooperative programs and special credit arrangements;
- 6) Northern research;
- 7) Northern specialists; and
- 8) Native studies.

Letters have been sent to each department within the University requesting relevant data. As well, the Boreal Institute hopes to hear from all other relevant sources. Readers who feel that any aspect of this profile may have been overlooked or that the profile could be expanded, are invited to contact the Boreal Institute. It is the intent, of ACUNS and of the Boreal Institute, that a potential Northern student will have, as a resource, a comprehensive overview and a complete profile of the University and its northern-oriented education and research.

For more information or comments, call Pat Frey at the Boreal Institute (432-4999/please leave a message). It would be appreciated if comments could be received by 30 December.

Water Under the (High Level) Bridge Rates Detailed Study

The recommended intake of water by an individual during the course of a day is 6 to 8, 8-ounce glasses. When it's spring in Edmonton, however, it's not always bottoms up time. Steve Hrudey, well aware that many Edmontonians have their doubts about the quality and safety of their drinking water, has entered into an agreement with the City of Edmonton and the Government of Alberta to undertake "a critical assessment of drinking water in Edmonton."

"Every spring, people have something to say about water . . . I want them to direct their opinions to my office," says the Professor of Environmental Engineering in the Department of Civil Engineering.

He shouldn't have to launch a campaign to solicit views. As he notes in the study's statement of need, "... spring runoff and major storm events have led to aesthetic problems with the treated water distributed to Edmonton consumers (noxious taste, odor and color). These problems along with an increased public and professional

awareness of possible links between trace substance intake and human health have caused many questions to be raised about the quality and safety of Edmonton's drinking water."

He notes too that concerns with possible waterborne transmission of disease by the presence of pathogenic microoganisms have been raised. "These circumstances, over the past several years, have caused many Edmontonians to doubt the quality and safety of their drinking water."

Dr. Hrudey has identified a group of experts to act as subconsultants and has written detailed task descriptions which have been reviewed by the steering committee. On 6 December, he held a news conference at the Rossdale Water Treatment Plant.

Public input is needed in order to determine how Edmonton's drinking water compares with other jurisdictions, whether there are valid health concerns which must be addressed and whether there are feasible solutions to the intermittent aesthetic problems which have occurred.

Dr. Hrudey's draft report will be submitted to city authorities at the end of June 1986. A public forum will be scheduled for the fall because "a review on strict technical grounds is not going to solve the problems or ease suspicions." The final report will be submitted by 31 December 1986.

The team of subconsultants fielded by Dr. Hrudey includes Ronald Coutts, University Professor, Pharmacy and Pharmaceutical Sciences; Peter Huck, Professor of Environmental Engineering; Byron Kratochvil, Professor of Chemistry; and Daniel Smith, Professor of Environmental Engineering.

A principle of the study is that the subconsultants "should reflect a balance between those at the forefront of current research in specific aspects of drinking water treatment and evaluation and those with extensive practical experience in providing water supply to large cities"

Dr. Coutts, a specialist in medicinal chemistry and analytical toxicology, will investigate the methods of sampling and analysis used for monitoring water for organic chemical substances.

Prominent among Dr. Huck's research interests are removal of organic substances from drinking water and evaluation of alternative drinking water disinfectants. His assignment is to obtain data from European communities to compare raw water supply and finished water quality. He will "critically review water treatment practice in Edmonton in comparison with similar circumstances in Europe."

An Iowa State University PhD, Dr. Kratochvil has consulted for Syncrude Research Ltd. and Alberta Environment. He will investigate the methods of sampling and analysis used for monitoring Edmonton water for physical and inorganic chemical parameters. He will also investigate the procedures used for quality assurance and quality control used on physical and chemical water quality monitoring of Edmonton water.

Dr. Smith's researches include water quality modelling and microorganism survival in northern rivers, ozone water and wastewater disinfection and cold regions environmental engineering. He will obtain and review data on the microbiological quality of the raw water supply

(the North Saskatchewan River) for Edmonton and compare these data with that available from other comparable locations.

Dr. Hrudey, Professor of
Environmental Engineering, hasserved as Chairman of the
Hazardous and Toxic Wastes
Management Committee of the
Canadian Society for Civil
Engineering and has consulted for
the B.C. Ministry of Environment,
the Alberta Oil Sands Technology
and Research Authority, and
Alberta Environment. He has
testified as an expert witness on
matters of water pollution analysis
and industrial waste management.

As Director of the over-all study, he will coordinate all the individual expert reports to produce the draft and final study reports.

Thank You to Photographers

The following acknowledgment was prepared for Folio by Len Young, Director of Printing Services.

As is true in judging many contests, the recent review of "Alberta Scenics" submitted for inclusion Printing Services' wall calendar resulted in a "hung jury." Twenty-three persons submitted a total of 46 prints and 84 slides for consideration. Of this total of 130 pictures, we needed to choose only two. We must hasten to add that this choice was not made with any professional regard to photographic technique, etc. Very subjective reasons for picking nice pictures, with some consideration given to reproducibility by the offset printing process, were the major criteria.

Because we could not make the final decision between the last remaining three pictures surviving this evaluation process, we obtained permission to use the third prizewinner on Printing Services' season's greetings card.

For all those submitting the pictures, we thank you for the very entertaining evaluation process and trust that the final choice will reflect the high standards of subjects that were submitted. The eventual three winners were Tats Yamamoto (Department of Microbiology), Raymond Schral (Department of Plant Science), and Malcolm Devine (Department of Plant Science).

FOLIO

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Office of Public Affairs 423 Athabasca Hall University of Alberta Edmonton, Alberta T6G 2E8 (403) 432-2325.

All enquiries and correspondence should be directed to: Ron Thomas Editor

Public Affairs produces Folio on a regular basis for the staff and other interested persons.



University of Alberta

Deadlines:

Notices of coming events: 9 a.m. three weeks in advance of desired publication date.

Classified advertisements: 3 p.m.

one week in advance of desired publication date. This date also serves as the deadline for cancellation of advertisements. Advertisements cost 30 cents per word with no discount for subsequent insertions. There is a maximum limit of 30 words and a minimum charge of \$1.50. Contributors' corrections will be assessed at \$1.50 for each line in which an insertion is made. Advertisements cannot be accepted over the telephone. All advertisements must be paid for in full at the time of their submission Display advertisements: 3 p.m. one week in advance of desired publication date. Contact Public Affairs for sizes, rates and other

The editor reserves the right to select, edit and position submitted copy. Views expressed in *Folio* do not necessarily reflect University policy.

Folio contents may be reprinted with acknowledgment.

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Robert Newton, 1889 - 1985

Born in Montreal, 7 February 1889, Robert Newton received his early education in that city, following which he enrolled in Macdonald College, a branch of McGill

resity, where he undertook udy and research of biological science.

"He was," reads The Canadian Encyclopedia, "one of five children whose father disapproved of higher education; but all, including two girls, became scientists, four with PhD qualifications."

Following graduation from Macdonald College, he served as District Agriculturist for the College, Chief Assistant Dominion Cerealist at Ottawa, and Director of Agricultural Instruction for the Province of New Brunswick.

In the spring of 1915, he enlisted in the Canadian Army and during the next four years served with distinction as an officer in the Canadian Field Artillery. He was awarded the Military Cross in 1917.

He was appointed Assistant Professor of Field Husbandry, University of Alberta, in 1919. Five years later, Dr. Newton was appointed Professor of Plant Biochemistry and Head of the Department of Field Crops, a position he held for eight years.

In 1932, he was seconded to the nal Research Council to nize and consolidate the Division of Applied Biology. Returning to Alberta as Dean of Agriculture in 1940, he became Acting President in 1941 when W.A.R. Kerr retired. From 1942 to 1950, he served as President. As President, he was also Director of Research, Research Council of Alberta. After his retirement from the University, he became the first full-time Director of the Research Council, 1950-51.

Robert Newton was elected a Fellow of the Royal Society of Canada in 1930, and was President of the Biological Section in 1944-45. Fellowship in the Agricultural Institute of Canada was conferred upon him in 1938, and he served as President in 1942-43.

In 1947, he was appointed a trustee of the National Gallery of Canada. His interest in art was shared by his wife, Emma Reed Newton, and together they collected a large and valuable group of paintings which they presented as a gift to the University of

ambridge University awarded him an honorary Doctor of Science degree in 1948; he also held the degree of Doctor of Laws. honoris

causa, from the Universities of Manitoba and Saskatchewan.

In The History of The University of Alberta 1908-1958, John Macdonald wrote: "As like his predecessors, Dr. Newton had to cope with certain special problems over and above the regular duties of the position. As President, he had to play an important part in the work of the Survey Committee and in framing the new University Act, which grew out of the recommendations of that body. But the crucial issues facing the University during his regime were two: the adjustments and improvisations needed to put the University on a war-footing, and the large consignment of brand-new problems dumped on the University at the end of the war. There was no precedent to go by from the First World War, when the matter of military service was settled by conscription, and post-war issues of rehabilitation and the like were left to settle themselves.

"To be sure, he was fortunate in having behind him a provincial government which not only had the necessary resources at its disposal but was ready to use these for what appeared to be worthy purposes. But without clear and competent direction from the University itself, a government, however co-operative, can do little. It has too many other things to think about. Dr. Newton supplied the necessary direction."

The Edmonton Journal of 22 May 1950 said: "Not one of the nine years of Dr. Newton's responsibility was normally academic; that he has been able to discharge his duties so well in spite of the heavy strain under which he had to labor is an achievement reflecting great credit on him."

He retired to Vancouver in 1951 and later moved to Laguna Hills, California.

Immediately upon learning of the appointment of Myer Horowitz as President of the University, Dr. Newton wrote him, noting that of the University's nine Presidents, two were graduates of Macdonald College.

"His initial letter led to a continual correspondence. I never met him but I feel as though I have," Dr. Horowitz told Folio.

An active man throughout his life, Dr. Newton contributed articles to a community newspaper until shortly before his death on 22 November 1985. Many of his submissions had to do with the University of Alberta and with

agriculture in Canada and the United States.

Dr. Newton's wife predeceased him several years ago. He was also predeceased by one sister, Margaret, of Victoria, and two brothers, William, of Sidney, B.C., and John, formerly of Edmonton and latterly of Vancouver. The only surviving family member is his sister, Dorothy Swales, a resident of Ste. Anne de Bellevue. Ouebec.

The Alberta Research Council Building at 87 Avenue and 114 Street was renamed The Robert Newton Research Building on 24 July 1985. □

FSIDA and U/CSPF Allocations

The advisory committees of the Fund for Support of International Development Activities (FSIDA) and the University/Community Special Projects Fund (U/CSPF) recently approved funding for nine projects.

The recipients of FSIDA monies are:

- Graham Fishburne, Elementary Education, \$3,000 for return airfare for two between Canada and Bhutan, curriculum materials, and shipping costs associated with the development of new elementary school curriculum in the Kingdom of Bhutan;
- Don Massey, Elementary
 Education, \$7,409 for return
 airfare from Edmonton to Papua
 New Guinea, freight of reference
 materials, and subsistence for
 five months (subject to the project
 being approved by an
 appropriate Faculty Ethical
 Review Committee in regard to
 research with human subjects);
- James Patrie, Elementary Education, \$2,500 to cover teaching and administrative costs connected to TESL Internships in Kangweon, Korea;

 Kevin Burns, Drama, \$3,400 for acquisition costs, packing and shipment for the distribution of resource materials on development issues/practices to India and Bangladesh.

Projects supported by U/CSPF are:

- Helen Collinson, \$3,850 for a designer, photographs, typesetting and printing associated with the production of an information brochure for the Ring House Gallery;
- Norman Yates, Art and Design, \$12,000 for capital and operating costs (materials and labor) for the creation of the mural "West and North":
- Louis Pagliaro, Pharmacy, \$6,702 for operating funds for the continuing education program for rural Alberta pharmacists;
- Jim Parker, Archives, \$6,530 for a study to determine the feasibility of entering holdings on the Library data base; and
- \$4,160 to the University of Alberta Debating Society to allow 10 people to travel to the Canadian Intercollegiate and World Debate Championships. □

The Donning of the Blades

Two weeks ago, Folio published a short article asking the University community to support Campus Recreation's latest venture, ice skates for international students. According to Art Burgess, skates are being donated but many more pairs are needed if Campus Recreation is to meet the demand.

The initiative is to provide international students, who have never seen skates or ice, with the

opportunity to experience rather than watch an important element of the Canadian winter.

People are asked to donate their old skates (in reasonably good condition, please). Just tie the laces together and drop the skates in the collection box at the Equipment Room in the Van Vliet Centre (Phys. Ed.)

Campus Recreation's telephone number is 432-2555. \Box

Letters

International Student Affairs

I wish to support Sister Moylan (Folio, 21 November 1985) in her appreciation of International Student Services. I, too, am a newly arrived international student and would like to express my heartfelt thanks to the personnel at the Office of International Student Affairs. The warm and caring assistance I was accorded by them when I first arrived in this country without friends or acquaintances made an otherwise awesome experience a pleasure I shall remember for a long time. These people were my first introduction to Canada and Canadians and I wish to thank them and all the Canadians I have met so far for all the help and courtesy I have received. Yours is a cold country, but you have warm hearts!

Amandip Kaur Utal
Department of Biochemistry

Make Visits to Art Exhibitions Hands-off Experiences

Many of us enjoy the art on display at various locations on campus. It provides visual stimuli, makes the environment more human, brightens up large impersonal spaces, and contributes to intellectual and personal growth.

I was distressed to learn that the "Painting the Town" exhibition in the Rutherford Galleria was removed a week earlier than planned and that the next exhibition, "Understanding China through Cartoons", is unlikely to be displayed in this area. Why is this happening?

The Director of University Collections, Helen Collinson, informed me that the reasons were theft and vandalism of the objects on display. The Rutherford Galleria exhibitions are an additional project of Ring House, one that was originally strongly supported to provide visual interest in this "large open space" between Rutherford I and II and to improve the "quality of life" on campus.

It is disappointing that the majority of people have to be denied access to exhibitions of works of art just because one or two individuals consider it their right to steal or deface art works.

Bente Roed Cochran

Committee for the Improvement of Teaching and Learning

Drop That Definite Article

A reminder to University staff and students. For all intents and purposes, save legally-drafted documents incorporating such words as "The Governors of The University of Alberta," the name of our University is that which was decided upon at the 22 November 1920 meeting of GFC. "University of Alberta", not "The University of Alberta," should therefore be used on all promotional materials, handbooks, posters, brochures, and the like.

On another front, while it is recognized that individual academic departments form the core of the University, their indivisible relationship to the whole should be emphasized especially on materials sent or posted off campus. It is not the Department of Architecture that supports any activity, rather it is the University of Alberta Department of Architecture. Two small matters, perhaps, but they are of cumulative importance in terms of public perception.

D.C. Norwood, Chairman
President's Advisory Committee on Visual Identity

(Ed. A "Publications Standards Guide," similar to the "Stationery Standards Guide" issued in June 1984, is now in the final stages of preparation and will be ready for distribution in the New Year. It should be of great benefit to people preparing booklets, pamphlets, brochures, etc. Also, for all matters concerning use of the University's new corporate signature, please refer to the Office of Public Affairs, 423 Athabasca Hall.)

Wanted: Nominations for Rutherford Award for Excellence in Undergraduate Teaching

The GFC Undergraduate Teaching Awards Committee (UTAC) reminds the University community that nominations are now being sought for the annual Rutherford Award for Excellence in Undergraduate Teaching.

The Rutherford Award was established in 1982 to recognize publicly excellent teaching, to publicize such excellence to the University and the wider community, to encourage the pursuit of such excellence, and to promote informed discussion of teaching and its improvement at the University of Alberta.

Nominations are made by Faculties that teach undergraduate students, and information about the nomination procedures and adjudication criteria has been sent to those Faculties. The deadline for receipt of nominations by UTAC is 14 February 1986. Because

nominations should be made through a Faculty Committee, individual Faculties will in most cases have established earlier deadlines to allow for internal adjudication procedures.

At least one award, but not mo. than four, will be given annually. The GFC Policy Manual states that: "Individual award winners shall be publicly recognized at a special occasion and/or Convocation and shall receive an appropriate memento. A permanent plaque recognizing their achievement shall also be displayed in a suitable place in a University building." The GFC Executive Committee recently approved a recommendation from UTAC that the permanent plaque be located in the Rutherford Galleria. Beginning with the awards for 1985, individual winners also receive cash prizes of \$2,500. □

Martin Francis Loftus, 1937 - 1985

On 28 November 1985, Martin Francis Loftus died suddenly in hospital at the age of 48 years.

Mr. Loftus was born in Edinburgh, Scotland, on 12 June 1937. After graduating with distinction from high school, the Holy Cross Academy, he performed his National Service with the Royal Corps of Signals from 1955 to 1957, and was demobilised with the rank of Captain.

He read mathematics at the University of Edinburgh and moved to work in London, England, where he met Rita Scally and where later they became engaged.

In December 1960, he came to Edmonton to join his family who had emigrated earlier from Scotland. Rita joined him in June 1961 and on 2 March 1962, they were married with the papal blessing at St. Joseph's Cathedral. They returned to London, where they spent 12 happy years making many friends from all walks of life. For four of these years he pursued his studies reading mathematical logic and philosophy at the Open University, while following a career specialising in financial management.

In 1974, Martin and Rita Loftus returned to Edmonton and in 1978,

Mr. Loftus joined the University academic staff as an Administrat. Officer in the Budget Planning Office. He made significant contributions in the creation and development of mathematical models for the management of the University's budget and planning processes. Despite having had no previous experience in the field of computers, Mr. Loftus programmed these models for the University's major computers. (At the time of his death, he was working on a future series of planning models for micro-computers.)

Mr. Loftus had two avocations, golf in the summer and English literature for the remaining 365 days each year.

He was also an accomplished pianist and classical guitarist.

Wherever his academic studies took him—and these studies were varied, the English language, reading, writing, books—all that came within the scope of what he termed "English Lit". These were his loves. He did not study the subject; he lived it, he absorbed it. His knowledge of English, from Chaucer to Hemingway, from Shakespeare to Waugh was voluminous.

His personal library was varied to include fiction, biography, travel

and all kinds of light verse. His remarkable memory laid at his disposal everything from golf statistics to the more dubious work of Robert Burns.

In that personal library mentioned, he could put his hand on almost any volume at notice. Yes indeed, Martin Loftus, in his beloved Lothian dialect, was "A Lado' Pairts". And he would be the

who did not know what that meant.

He leaves to mourn his loss his loving wife, Rita, his parents, Margaret and Martin Loftus of Edmonton, and two brothers and two sisters, James and wife Rena of Scotland, Anne Loftus, Patrick Loftus and wife Sylvia, Margaret Bramwell and husband Mike, all of Edmonton, and several cousins, nieces and nephews.



The Deans of Agriculture and Veterinary Medicine met recently on campus. They discussed their role in the future of agriculture, re-emphasizing the place of research and education to assure a viable future for the industry. The problems of shifting emphasis in agricultural research to accommodate new and promising areas were considered in relation to general fiscal restraint. Front row (left to right), D. Rennie, University of Saskatchewan; R. Roy, University of Montreal; H. McRae, Nova Scotia Agricultural College; G. Hamilton, Western College of Veterinary Medicine, University of Saskatchewan; R.T. Berg, University of Alberta. Middle row (left to right), F. McEwen, Ontario Agricultural College, University of Manitoba; J. Rh. Ads, University of British Columbia; N. Nielsen, Ontario Veterinary College, University of Guelph. Back row, R. Buckland, Macdonald College, McGill University (left); G. Thompson, University of Prince Edward Island.

Talks

Medicine

13 December, 8 a.m. Stuart McLeod, Hospital for Sick Children, Toronto, "Medical-Legal Implications of Drug Prescribing." 2-115 Clinical Sciences Building.

14 December, 8 a.m. Roger Amy, "Pathologic Classifications of Prostate Cancer." 5H202 Walter C. MacKenzie Health Sciences Centre.

Comparative Literature

13 December, 3 p.m. Katie Jones, "Welsh Literature." Senate Chamber, Arts Building.

Canadian Institute of Ukrainian Studies

13 December, 7:30 p.m.
Orest Martynowych, "Radicals, Priests and Peasants: The First Phase of Ukrainian Emigration to Canada."

Ye Lounge, Athabasca Hall.

Chemistry

16 December, 11 a.m. Heinz G. Floss, Chairman, Department of Chemistry, Ohio State University, "Studies in Antibiotic Biosynthesis." E3-25 Chemistry East.

Rehabilitation Medicine

16 December, 4 p.m. Lynette Chandler, University of Puget Sound, Author of Movement Assessment of Infants, "Screening for Movement Deficits: Issues and Some Answers." 303B Corbett Hall.

Plant Science

18 December, 1 p.m. Andrew Hanson, MSU-DOE Plant Research Laboratory, Michigan State University, "Identifying and Isolating Genes Related to Environmental Stress Resistance." 1-06 Agriculture-Forestry Centre.

The Arts Special Collections

Until 10 January. "Louis Riel and the North-West Rebellion—1885." B7 Rutherford South.
16 December to 10 January. "And on earth peace, good will towards men." The Christmas spirit throughout five centuries, in a display of illustrations, prose and poetry. B7 Rutherford South.

Continued on page six

PACSH Vacancy

The President's Advisory Committee on Sexual Harassment has a vacancy for one male member of the non-academic staff. The male non-academic staff member is required to serve as an alternate member of PACSH for a term of office beginning immediately and expiring in June 1987.

Alternate membership on PACSH does not require attendance at meetings throughout the year. Members do, however, serve on panels which assess and investigate sexual harassment cases. A training session is organized to orient new members. If you are interested in serving on this committee, or if you would like to submit a nomination, please write to Mrs. E.A. Solomon, Coordinator of the Committee, 2-5 University Hall, by 20 December.

Activities

Leendert Mos, Acting Director, Center for Advanced Study in Theoretical Psychology, lectured for six weeks (29 July to 6 September) at universities in the Republic of South Africa at the invitation of the SA Human Sciences Research Council...The paper "Islam and Authoritarianism: A Critical Analysis" was presented by Ashraful Hasan at the Fifteenth Annual Meeting of the Canadian Council for Southeast Asian Studies. The meeting took place at Université Laval, 1 to 3 November...A reception honoring Denis Goodale on his retirement from the Faculty of Business was held on 21 November at the Stollery Centre. Honoring Professor Emeritus Goodale were members of the Society of Management Accountants of Alberta and the Institute of Chartered Accountants of Alberta, former students now in the business community and Faculty members...Trevor Slack returned from the North American Society for the Sociology of Sport Conference (held in Boston, 7 to 10 November) with "half" of the International Committee for the Sociology of Sport's Junior Scholar Award. The co-recipient was Barbara Brown, University of Waterloo. Entries for the award were received from throughout North America, Western Europe and the Soviet Union. Dr. Slack was selected on the basis of his PhD dissertation "An Organizational Case Analysis of a Voluntary Sport Oganization"...Myer Horowitz's off-campus commitments in recent weeks have included the delivery of the addresses "Educational Policy" (Rutherford Society, 5 November) and "Perspectives on Graduate Studies" (Education Society of Edmonton, 18 November)... Several members of the Muttart Diabetes Research and Training Centre made presentations at the XII Congress of the International Diabetes Federation (IDF) in Madrid. Their number included G.D. Molnar, M.A. laworski. and R.V. Rajotte. Dr. Molnar, as Chairman of the Clinical and Scientific Section of the Canadian Diabetes Association, also attended the General Council of the IDF, the Regional Advisory Committee (for Canada-U.S.A.) and was a member of the International Advisory Board of the Congress. Prior to the IDF Congress, Drs. Molnar and Rajotte attended the XII Congress of the European Society for Artificial Organs held in Athens. Dr. Rajotte also addressed the Society for Cryobiology's 22nd Annual meeting in Madison, Wisconsin, and was a guest speaker at the Second International Conference, "The Use of Human Tissues and Organs for Transplant" in Washington, D.C....Alexander Matejko's book Comparative Work Systems: Idealogies and Realities of Eastern Europe has been published by Praeger in New York.

Ring House Gallery

Until 15 December, "Romanian Prints"-45 prints by 31 Romanian print artists.

Until 5 January. "Images of Peace"—The
Second Annual Global Mail Art Exhibition.

SUB Theatre

15 December, 6:30 p.m. Cantata Santa Maria De Iquique—live music from South America. Cecilia Novella, 432-3272.

21 December, 5 p.m. The 11th Annual Edmonton Jaycees Christmas Show featuring Paul Hann, Dale and Lynda Harney and the Kenuppets. 426-2525. 28 December, 1:30 and 4 p.m. The South Edmonton Jaycees present "The Magic of Christmas." 482-1478.

Musicians' Chamber Music **Appreciation Society**

28 December, 8 p.m. Stephen Bryant, violin; Sue Jane Bryant, viola, and Derek Gomez, cello. Convocation Hall.

Broadcasts

Radio

Programs broadcast on CKUA radio 580 AM and 94.9 FM.

14 December, 7 p.m. "University Concert

21 December, 7 p.m. "University Concert

Programs broadcast on CJSR radio 88.5

15 December, 10:20 a.m. "Science Digest—Computational Chemistry." 22 December, 10:20 a.m. "Paper Tygers—Comedy Writing."

Positions

The University of Alberta is committed to the principle of equal opportunity in employment and encourages applications from all qualified people.

In accordance with Canadian Immigration requirements, these advertisements are directed to Canadian citizens and permanent residents.

Academic

Assistant Professor, Department of Anthropology

The Department of Anthropology has an opening for a tenure-track appointment, commencing 1 July 1986, subject to budget approval. Rank is Assistant Professor. 1985 annual salary floor is \$30,316. PhD and relevant teaching and research experience are both important. The position is in the area of Anthropology of Religion/Symbolic Anthropology, and preference will be for a candidate with geographic interest in any of Sub-Saharan Africa, North Asia, South Asia, Northern Canada. However, we are seeking the best candidate and related topics could be considered.

Send applications (including complete curriculum vitae and names of three references) to Dr. Michael I. Asch, Chairman, Department of Anthropology, University of Alberta, Edmonton, Alberta T6G 2H4, by 10 January 1986.

Senior Demonstrator, Department of Genetics. Winter Session 1985-86

To demonstrate and grade exercises and assignments for Biology 297 (Heredity) covering the cellular and molecular bas of the transmission of hereditary characteristics; Mendelian inheritance and its cytological basis; microbial genetics; linkage and genetic mapping; DNA as genetic material; gene action; the genetic code. This course is scheduled for the day division, 6 January to 11 April. Salary and number of sections to be taught is negotiable depending on experience and available

Applications, including curriculum vitae with the names of three references, should be sent to Mr. Dennis Wighton, Department of Genetics, University of Alberta, Edmonton, Alberta

Closing date: 2 January 1986 or when the position is filled.

Special Research Assistant, Faculty of Extension

Term: 15 January to 15 July 1986. Salary: \$2,500 per month.

Application Deadline: 31 December 1985.

The person selected for this position

will be responsible for providing the Faculty of Extension with research and copyediting support for a major report about the Faculty. Specific tasks include but are not limited to:

- collating and indexing written materials about the Faculty's programs that have been prepared for the
- carrying out archival and literature searches and reviews on specific topics
- gathering information on specific questions of interest to the Faculty from individuals and organizations external to the Faculty.
- writing summaries of archival and literature reviews and other research undertaken for the report.
- assembling and editing copy prepared by others
- assisting with the preparation of tables and graphs summarizing statistical information about the Faculty, its programs, services and students.

The ideal candidate will have an MA or MSc or doctorate in adult education or the social sciences and be familiar with the field of university continuing education. Two or more years experience as a copyeditor for a publishing house or a scholarly journal is desirable. The ability to type and use word processing equipment is an asset. The ability to m deadlines is essential.

The position reports to the Dean of the Faculty. A brief description of the scope of the work of the Faculty is available.

Applicants should forward a letter of application, a résumé and the names of three references to: The Dean, Faculty of Extension, 220 Corbett Hall, University of Alberta, Edmonton, Alberta, Canada T6G 2G4, by 31 December 1985.

Administrative/Professional Officer.

Department of Art and Design

The Department of Art and Design is seeking an Administrative/Professional Officer. The incumbent will be involved in all aspects of the department's administration, including budgeting, policy development, public relations, fund development, arranging exhibitions, committee work and personnel supervision. A detailed job description is available upon request.

Relevant degree(s) or equivalent experience required. Preference will be given to applicants with considerable xperience in administration, budget planning and control and with demonstrated public relations skills.

The Department of Art and Design is

one of the largest of its kind in Canada with an annual operating budget in excess of \$1.5 million and offerings in the areas of painting, printmaking, sculpture, visual communication design,

industrial design and art history.

This is a full-time position with an Administrative/Professional Officer designation and a 1985-86 salary range of \$24,682 to \$37,030.

Interested candidates should forward their applications by 20 January 1986, including the names of three referees to Jorge Frascara, Chairman, Department of Art and Design, University of Alberta, Edmonton, Alberta T6G 2C9.

Statistics and Applied Probability

The Department of Statistics and Applied Probability invites applications for a limited term (8 to 12 months) position in any area of statistics or probability at the assistant professo level (salary: \$2,526.33 per month) effective 1 September 1986. The appointment will be made subject to funds being available. Closing date: 15

Interested individuals should send a or transfer individuals should send a vitae to: Dr. J.R. McGregor, Department of Statistics and Applied Probability, University of Alberta, Edmonton, Alberta, Canada T6G 2G1.

should be available to teach some davtime sessions as well as some evening ones.

The salary is \$15.41 per hour. Contact Carey Castillo, Training Coordinator, at 432-2511, 363 General Services Building.

To obtain further information on the following positions, please contact Personnel Services and Staff Relations, 2-40 Assiniboia Hall, telephone 432-5201. These vacancies cannot be guaranteed beyond 6 December

Laboratory Assistant II, Provincial Laboratory, (\$1,190-\$1,478) Clerk Typist II, Pension and Benefits, (\$1,190-\$1,478)

Clerk Typist II (Part-time), Continuing Medical Education, (\$680-\$845) Clerk Typist III, Personnel Services

Staff Relations, (\$1,326-\$1,666) Clerk Typist III, Centre De L'Education Permanente, (\$1,326-\$1,666) Clerk Steno III (Part-time), Geology,

(\$663-\$833)

Clerk Steno III, Educational Administration, (\$1,326-\$1,666) Clerk Steno III, Dean of Science, (\$1,326-\$1,666)

Clerk Steno III (Term), Dean of Education, (\$1,326-\$1,666) Clerk Steno III, Genetics, (\$1,326-\$1,666)

Senior Financial Records Clerk, Housing and Food Services, (\$1,326-\$1,666)

Senior Financial Records Clerk, Chemical Engineering, (\$1,326-\$1,666)

Publications Assistant I (Part-time/Trust), Medicine, (\$814-\$944)

Secretary (Trust/Part-time), Foods and Nutrition, (\$739-\$944)

Medical Stenographer (Split-Funded), Medicine, (\$1,478-\$1,888) Medical Stenographer, Pediatrics, (\$1,478-\$1,888)

Administrative Clerk, Housing and Food Services, (\$1,478-\$1,888) Office Services Senior Clerk, Pension

and Benefits, (\$1,478-\$1,888) Departmental/Executive Secretary, Dean of Science, (\$1,666-\$2,144) Departmental/Executive Secretary, 1 Complex, (\$1,666-\$2,144)

Electronics Technician III (Half-time), Geology, (\$1,027-\$1,331)

Non-Academic

Casual Instructors for **Computing Services**

Computing Services offers a noncredit training program on the use of MTS, TEXTFORM and microcomputers.

The department has openings for instructors. Anyone with experience as a user of MTS, TEXTFORM and/or the IBM PC is invited to apply. Also required is the ability to relate well with new users and to explain the basics in clear and simple fashion. Applicants

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Newsletter Design Competition

The AASUA offers a \$200.00 prize to the winner of a contest to design a new title page for the AASUA Newsletter. The design, for a standard 8½" × 11" page, must incorporate the following information: AASUA Newsletter.

Contestants may wish to incorporate a new logo design for the AASUA in the new title page.

Entries should be sent to the AASUA office by January 1,

Technician I/II (Trust), Pharmacy and Pharmaceutical Sciences. (\$1,534-\$2,237)

Programmer Analyst II, Computing Science, (\$2,237-\$2,905)

For vacant Library positions, please contact the Library Personnel Office, Basement, Cameron Library, 432-3339.



Accommodations available

Rent - One-bedroom apartment near University. Reasonable. January-August (or?). 488-0351 evenings, 432-4104 days. Sale - Parkallen. Two-bedroom

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two-bedroom bungalow. Completely upgraded, new roofs, wiring, insulation, FA furnace. Two-bedroom suite in basement, double garage. Call Dorothy Leathem now, 434-0332. Royal LePage.

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Sale - Three University homes. Revenue or home. \$49,700 up. Ask for Chris Tenove, 433-5664, 436-5250. Spencer's.

Sale - By Windermere Golf Course. One acre lots. \$49,000 up. Ask for Chris Tenove, 433-5664, 436-5250. Spencer's

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